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ABSTRACT

A study was conducted to explore the relationship between the theoretical construct of Conceptual Level (Harvey, Hunt, & Schroder, 1961) and the dimensions of the Questionnaire of Teacher Belief of the Educational Process developed by Wehling and Charters (1969). The questionnaire and Hunt's Paragraph Completion Test of Conceptual Level were administered to 83 teacher education undergraduates. Data were analyzed by forming a correlation matrix and performing a factor analysis using varimax rotation for the final ten variables. Variables were seven teacher attitude dimensions (subject matter emphasis, personal adjustment ideology, student autonomy, teacher direction, emotional disengagement, consideration of student viewpoint, and integrative learning), plus the Conceptual Level measure and the two Hunt attitude-toward-teaching stems. Results lent support to the Wehling and Charters hypothesis that teachers high in dimensions that tend to illustrate short-range concerns (Teacher Direction) would be basically concrete in their perceptions. The second objective, to replicate Wehling and Charters' findings and to test the stability of the dimension of Student Autonomy versus Teacher Direction, produced findings consistent with theirs. Further analysis revealed no significant relationships between the dimensions of Student Autonomy versus Teacher Direction and the Hunt Attitude-toward-teaching stems. (JS)

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CONCEPTUAL SYSTEMS THEORY AND ATTITUDES TOWARD TEACHING[1]

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OBJECTIVES

Getzels and Jackson (1963) contend that a critical factor impeding research relating teachers' personality and attitude characteristics and teacher behavior, "is that research in this field is conducted in a theoretical vacuum." This study was designed to explore the relationship between the theoretical construct of Conceptual Level (Harvey, Hunt and Schroder, 1961) and the dimensions of the Questionnaire of Teacher's Belief of the Educative Process developed by Wehling and Charters (1969).

Conceptual Systems theory (Harvey, Hunt and Schroder, 1961) suggests that the major dimension of personality variation is the degree of concrete or abstractness or Conceptual Level (CL). Persons at a higher CL are expected to be more flexible, more capable of using alternative solutions, and more stress tolerant. Considerable evidence on construct validity supports this expectation (Schroder, Driver and Streufert, 1967 and Hunt, 1970).

In a different context, Wehling and Charters (1969) have developed a questionnaire with the intention of delineating the substance of teacher's belief systems regarding the classroom teaching-learning process. Wehling and Charters (1969) have identified eight dimensions that have emerged with some regularity from several factor analyses. The eight dimensions are: (1) Subject Matter Emphasis; (2) Personal Adjustment Ideology; (3) Student Autonomy versus Teacher Direction; (4) Consideration of Student Viewpoint; (5) Classroom Order; (6) Integrative Learning; (7) Emotional Disengagement; and (8) Student Challenge.

Wehling and Charters (1969) propose a relationship between the dimension of Student Autonomy versus Teacher Direction and the level of concrete or abstractness. In particular, they state, "relationships are presumed to exist between belief dimensions and the level of concreteness or abstractness characteristic of the various systems (Harvey, Hunt and Schroder, 1961).

Teachers high in dimensions that tend to delineate short-range, visible concerns of teachers such as the dimensions of Student Autonomy versus Teacher Direction, it is hypothesized, would be basically concrete in their perceptions..." p. 24).

The present study had three objectives. First, to test the hypothesis presented by Wehling and Charters (1969) that there is a relationship between CL as measured by Hunt et al. (1968) and the dimension of Student Autonomy versus Teacher Direction as presented by Wehling and Charters (1969). Second, to partially replicate Wehling and Charters factor analysis in order to determine the stability of the dimension of Student Autonomy versus Teacher Direction. Third, to test the relationship between the Wehling and Charters dimension of Student Autonomy versus Teacher Direction and an indirect method of measuring teacher attitudes toward teaching as developed by Hunt (1969).

METHOD

Sample

The subjects were eighty-three undergraduates majoring in Teacher Education at Syracuse University. All of the subjects were either in their junior or senior year, and all were enrolled in the same course.

Procedure

The Paragraph Completion Test of Conceptual Level (Hunt et al., 1968) and the Questionnaire of Teacher Conceptions of the Educative Process (Wehling and Charters, 1969) were administered to the sample during one class period.

The Questionnaire of Teacher Conceptions of the Educative Process consists of eighty-six items. The following seven dimensions were used for the present study: Subject Matter Emphasis-seven items; Personal Adjustment Ideology-ten items; Student Autonomy-four items; Teacher Direction-seven items; Emotional Disengagement-five items; Consideration of Student Viewpoint-seven items; and Integrative Learning-six items. Items did not overlap dimensions, and each

item was used for the dimension for which it had the highest loading. Total scores for each of the seven dimensions were used in this study. Student Autonomy and Teacher Direction were treated as separate dimensions because of the special interest of the study and had priority over other dimensions of the questionnaire.

The Paragraph Completion Test (Hunt et al., 1968) was also given. The test consists of six stems of Conceptual Level and two attitude toward teaching stems. The Conceptual Level stems are: What I think about rules...; When I am criticized...; What I think about parents...; When someone disagrees with me...; When I am told what to do...; and When I am not sure. The two attitude stems are: The best way to learn is... and The most important thing in teaching is. Scores were obtained for Conceptual Level and attitude toward teaching by means of two trained raters scoring the protocols according to the manual provided by Hunt et al. (1968). The inter-rater reliability, using a Pearson product-moment correlation, was .89.

The data were analyzed by forming a correlation matrix and performing a factor analysis using varimax rotation for the final ten variables (seven teacher attitude dimensions, CL and the two Hunt stems).

RESULTS

Table 1 presents the matrix of intercorrelations for the ten variables. An examination of the matrix reveals eleven coefficients significant beyond the .05 level. The correlation coefficient of -.38 between the dimension of Teacher Direction and CL is significant beyond the .01 level. This relationship lends support to the hypothesis proposed by Wehling and Charters (1969) that teachers high in dimensions that tend to illustrate short-range concerns (Teacher Direction) would be basically concrete in their perceptions. The

coefficient of correlation between the four item dimension of Student Autonomy and CL was .17, which is in the predicted direction, although not statistically significant. The correlation coefficient between the dimension of Subject Matter Emphasis and CL just misses significance at the .05 level. The two Hunt stems: The most important thing in teaching is... and The best way to learn is..., do not demonstrate a statistically significant relationship to any of the variables or to each other.

TABLE 1

The factor analysis yielded four factors. Table 2 presents the factor loadings; only those loadings which exceeded .40 are listed to clarify the basic pattern. There is some interdependence among the factors with three teacher attitude dimensions loading on two factors. These are: Subject Matter Emphasis loading on factors I and II; Student Autonomy loading on factors II and III; and Emotional Disengagement loading on factors I and III.

TABLE 2

Factor I - Content Emphasis

This factor accounts for 23 per cent of the variance. Three variables make up the factor laodings: Subject Matter Emphasis and Emotional Disengagement with moderately high loadings of .56 and .54 respectively; and Integrative Learning with a high loading, .81. Examples of items from each of the three dimensions are:

Subject Matter Emphasis

"Teaching of specific skills and factual subject matter is the most important function of the school."

"Before pupils are encouraged to exercise independent thought they should be thoroughly grounded in the facts and knowledge about the subject."

Emotional Disengagement

"A teacher's effectiveness rests upon his ability to maintain proper "professional distance" between the pupils and himself."

"His effectiveness is seriously impaired when the teacher permits himself to become emotionally involved in the personal problems of pupils."

Integrative Learning

"Pupils never really understand a subject until they can relate what they have learned to the broader problems of the world."

"Teachers must set definite items aside to show pupils the relationships between their subjects and the overall goal of education."

Factor II - Interpersonal

This factor accounts for 17 per cent of the variance and is bipolar in form. Student Autonomy and CL load in a positive manner, .62 and .70 respectively; while Teacher Direction shows a heavy negative loading, -.82 and Subject Matter Emphasis shows a moderate negative one, -.44. Examples of the Student Autonomy and Teacher Direction are:

Student Autonomy

"There is too great an emphasis on keeping order in the classroom."

"Children should be given more freedom in the classroom than they usually get."

Teacher Direction

"A firm hand by the teacher promotes emotional security for the pupils."

"Pupils do their best work when they know exactly what to expect from day to day."

Factor III - Professional

This factor accounts for 13 per cent of the variance and is bipolar in form. Four variables make up the factor loadings. Three variables contribute to the negative pole: Personal Adjustment Ideology, -.72 and Consideration of Student Viewpoint, -.74 show heavy loadings; and Student Autonomy, -.48 loads

moderately. The single dimension contributing to the positive pole is Emotional Disengagement, .65. Examples of the Dimensions of Personal Adjustment Ideology and Consideration of Student Viewpoint are:

Personal Adjustment Ideology

"The teacher assures optimum learning conditions by giving top priority to the social-emotional needs of pupils."

"Pupils gain a sense of belonging when the teacher encourages friendships among pupils in the room."

Consideration of Student Viewpoint

"The effectiveness of teaching is enhanced when the teacher has the ability to see the world as each of his pupils sees it."

"Children learn best in an atmosphere filled with love and emotional support."

Factor IV - Specific

This factor accounts for 11 per cent of the variance. The two Hunt stems make up the loadings: "Teaching," .74 and "Learning," .75.

The factor analysis results provide further support for Wehling and Charters hypothesis of the relationship between Teacher Direction and Conceptual Level.

The second objective of the study was to replicate Wehling and Charters (1969) findings and to test the stability of the dimensions of Student Autonomy and Teacher Direction. The correlation between Student Autonomy and Teacher Direction in this study was -.47 which, along with the factor loadings on Factor II, indicates that the dimension is bipolar and is consistent with Wehling and Charters findings.

The third objective of the present study was to test the relationship between the dimensions of Student Autonomy and Teacher Direction and the Hunt (1969) attitude toward teaching stems. No significant relationships were found between Student Autonomy or Teacher Direction and either of the Hunt stems.

IMPLICATIONS

Uncovering the relationship between teachers' personality and attitudes and the behavior of teachers in the classroom was beyond the limits of this study. Rather, this study is viewed as a first step in working toward such a goal in a theoretical manner. It is encouraging, for example, that support for Wehling and Charters (1969) hypothesis was obtained. In a later study (Victor, 1970), with the scoring reversed on the four Student Autonomy items, the correlation coefficient between Student Autonomy-Teacher Direction and CL was -.42. As research delineates the importance of such teacher characteristics as Student Autonomy, Teacher Direction and Conceptual Level to teacher behaviors, a clearer focus on how such teacher characteristics interacts with pupil characteristics may be accomplished. A number of these studies are underway or have recently been completed (e.g., Rathbone, 1970, Victor, 1970).

TABLE 1

INTERCORRELATION OF TEN VARIABLES*

	Variable	1	2	3	4	5	6	7	8	9	10
1	Subject-Matter Emphasis	---	-.19	-.12	.32	.26	.02	.19	-.21	-.13	-.05
2	Personal Adjustment Ideology		---	.47	-.16	-.29	.34	.26	.03	.05	.04
3	Student Autonomy			---	-.47	-.10	.25	.22	.17	-.01	-.06
4	Teacher Direction				---	.10	-.07	-.03	-.38	.02	-.01
5	Emotional Disengagement					---	-.34	.15	.02	-.18	-.06
6	Consideration of Student Viewpoint						---	.13	-.11	.04	.14
7	Integrative Learning							---	-.17	.11	-.04
8	Conceptual Level								---	.07	.15
9	Most Important Thing in Teaching									---	.17
10	Best Way to Learn										---

* N=83, r= .22 $<$ .05, r= .28 $<$ .01

TABLE 2

FACTOR LOADINGS FROM VARIMAX ROTATION

Variable	Factor I	II	III	IV
1 Subj. Matt. Emph.	.56	-.44		
2 Pers. Adjust.			-.72	
3 St-Aut		.62	-.48	
4 Tch-Dir		-.82		
5 Emot. Disen.	.54		.65	
6 Consid. St. Vpt.			-.74	
7 Int. Learn.	.81			
8 Conceptual Level		.70		
9 Most Imp. Tch.				.74
10 Best Way Learn				.75
Per cent of total variance	23	17	13	11

REFERENCES

Getzels, J.S. and Jackson, P.W. The Teacher's Personality and Characteristics. In N.L. Gage, Ed., Handbook of Research on Teaching. Chicago: Rand McNally, 1963.

Harvey, O.J., Hunt, D.E., and Schroder, H.M. Conceptual Systems and Personality Organization. New York: Wiley, 1961.

Hunt, D.E. A Conceptual Level Matching Model for Coordinating Learner Characteristics with Educational Approaches. Interchange, in press.

Hunt, D.E., et al. Manuel for Coding Paragraph Completion Responses for Adolescents. Unpublished MS, Syracuse University Youth Development Center, 1968.

Rathbone, C. Teachers' Information Handling Behavior when Grouped with Students by Conceptual Level. Unpublished Ph.D. dissertation, Syracuse University, 1970.

Schroder, H.M., Driver, M.J., and Streufert, S. Human Information Processing. New York: Holt, Rinehart, & Winston, 1967.

Victor, J.B. A Study of Personality, Attitudinal and Situational Determinants of Teacher Behavior in Regard to Child Misbehavior. Unpublished Ph.D. dissertation, Syracuse University, 1970.

Wehling, L.J. and Charters, Jr., W.W. Dimensions of Teacher Beliefs About the Teaching Process. American Educational Research Journal, 1969, 6, 7-30.